

# Administrative Management Tower Summary

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## Administrative Management Tower Summary

Administrative Management encompasses the resource management activities that are performed by agencies across the Commonwealth. These activities involve the day-to-day management and maintenance of internal infrastructure. Adequate levels of resources (people, time, funding, systems, etc.) are needed to meet the day-to-day functions of the Commonwealth. There are a variety of ways that Administrative Management services are delivered. In some cases Commonwealth agencies specialize in delivering administrative services, some on a fee for services basis, and others provide required tasks on a decentralized basis. Industry best practices along with the data obtained during the PPEA process suggests that specialization provides agencies higher service levels with resource savings and operational efficiencies.

The following activities have been reviewed by the Due Diligence teams:

- Equipment Management – The maintenance, administration, and operation of machinery and other capital assets, exclusive of information technology.
- Facilities Management – The maintenance, administration, and operation of office buildings, other buildings, and parking facilities that are owned or leased by the Commonwealth.
- Fleet Management – The maintenance, administration, and operation of vehicles and rolling stock including, cars, trucks, aircraft, and watercraft.
- Travel – Activities associated with planning, preparing, monitoring of business related travel for organization's employees.

A limited number of agencies provide the vast majority of these services. For example, many agencies operate and own vehicles but only a select few provide on-site maintenance services. The majority of fleet operations are provided by the Department of General Services and the Department of Transportation.

## Financial Resources

The majority of financial resources in the Administrative Management are applied to Facilities, Fleet and Equipment Management services. Services for these programs are primarily delivered on central intra-governmental basis by the Departments of Transportation and General Services. The three programs have similar costing structures with an average cost of approximately \$52,300 per FTE.. Exhibit 1 outlines how staff is allocated to administrative processes, based upon the responses to our survey. Exhibit 2 describes the relationship between contractors and staff supporting administrative processes. Exhibit 3 describes the allocation of costs by Administration Management process.

Exhibit 1      Administrative Management Resources

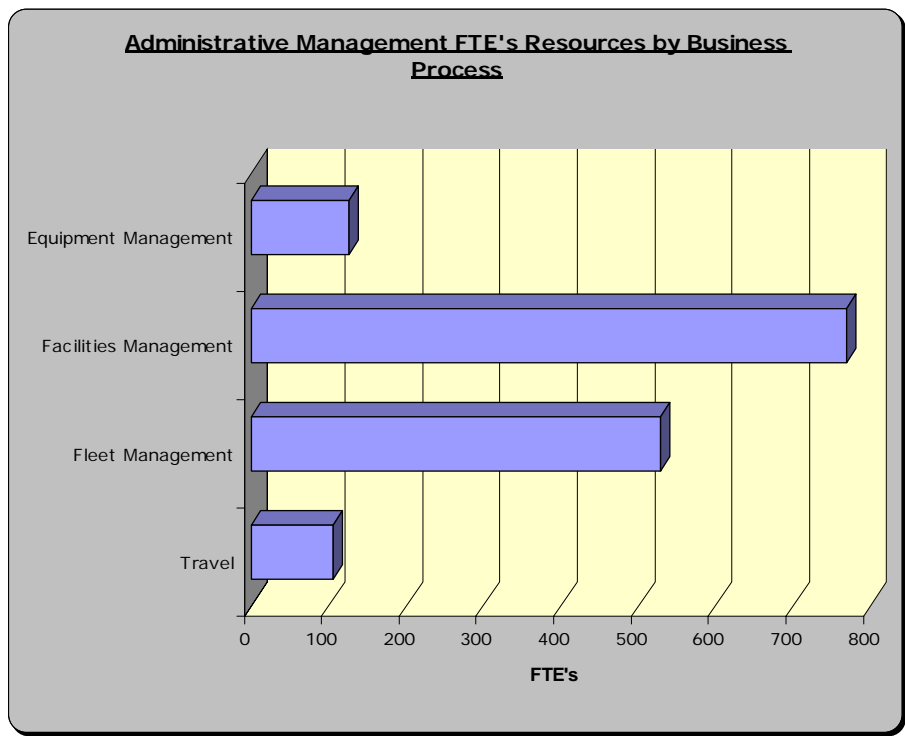
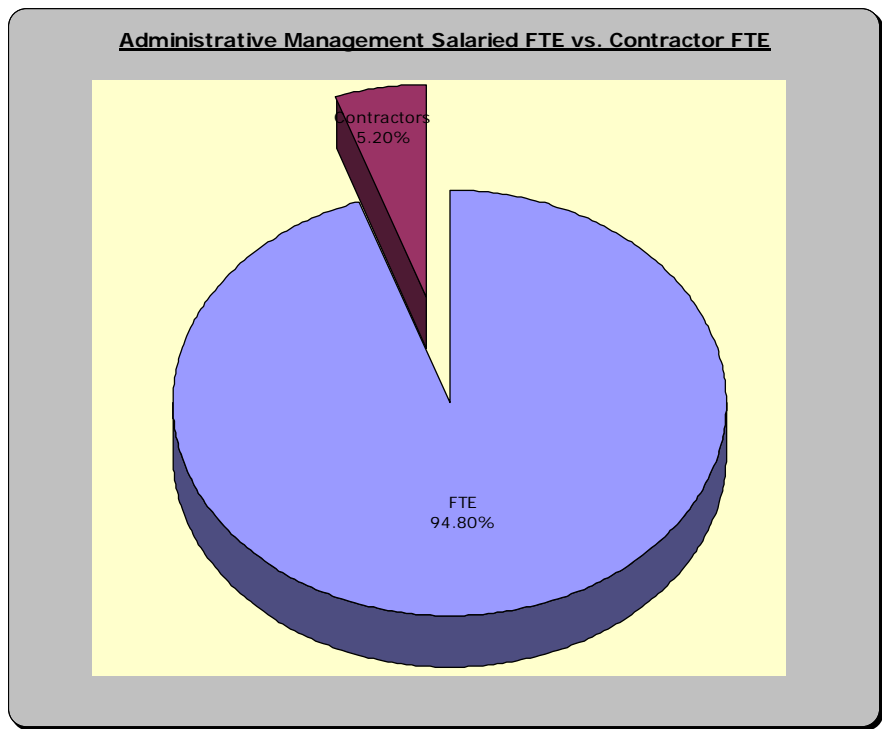
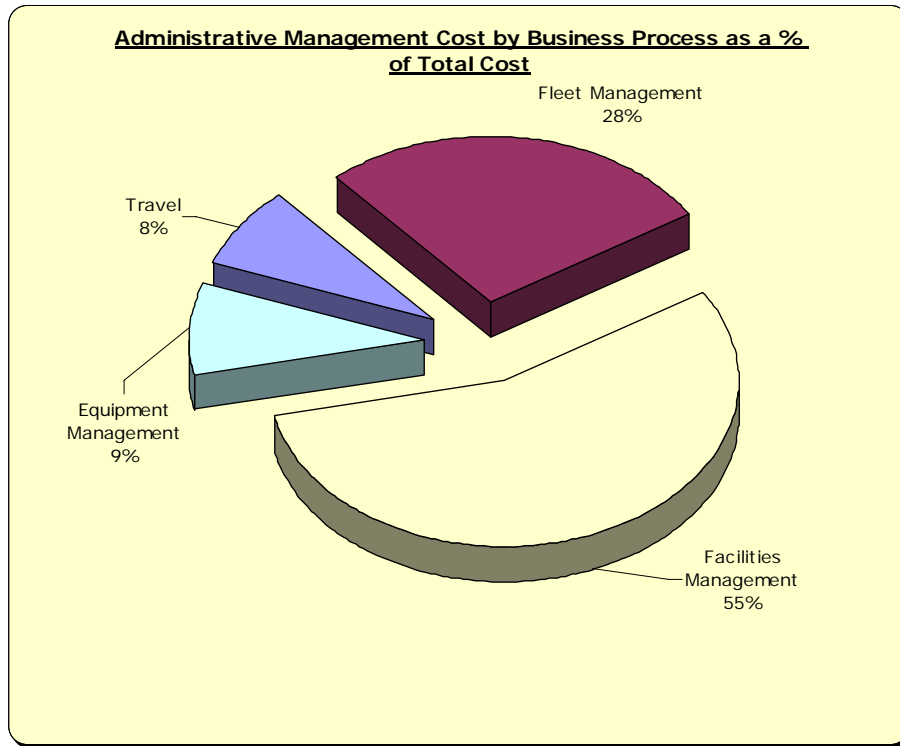


Exhibit 2      Contractor Utilization in Administration Management



**Exhibit 3      Total Cost of Administration Management**

Travel management including approval, planning, and reimbursement services are provided at similar cost levels throughout the Commonwealth. Survey results indicate that the administrative costs of managing travel is approximately \$64,500 per FTE. This could be a result of the high cost of complying with statewide and agency travel rules and procedures. Simultaneously, individual travel vouchers have relatively low monetary values when compared to other purchasing and AP functions.

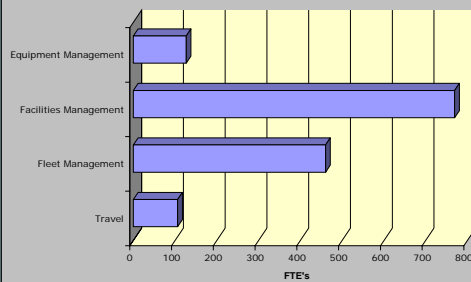
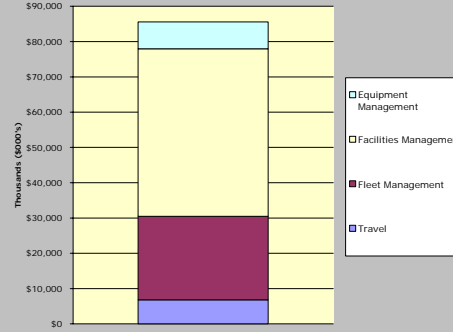
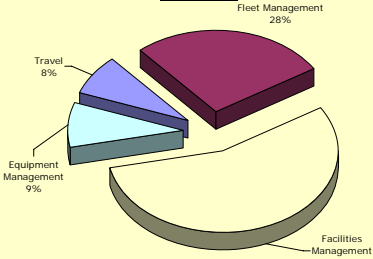
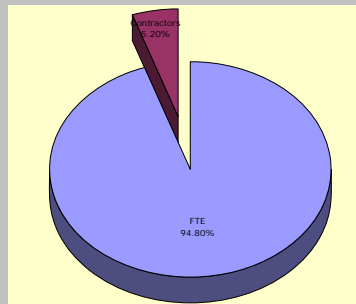
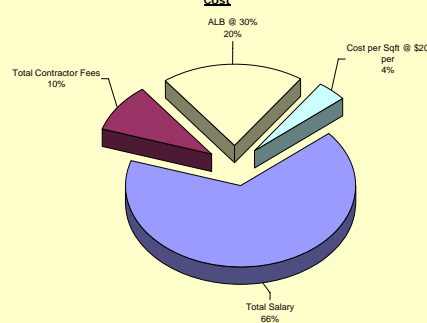
Exhibit 4 provides an integrated view of Administration resources and costs.

**Exhibit 4      Integrated Financials for Administration Management**

**Tower:** Administrative  
**Date:** 6/14/2005

**Allocation of Administrative Management FTE's by Function**

Function	FTE's				Contractor			Benefits		Facility			Total Cost
	FTE	Total Salary	Cost%	Average Salary	Contractors	Total Contractor Fees	Cost %	ALB @ 30%	Cost%	SqFT Allocation @ 125 per FTE	Cost per Sqft @ \$20 per	Cost%	
Travel	106.00	\$4,923,345	9%	\$46,447	1.45	\$150,800	1.8%	\$1,477,004	8.7%	13,250	\$265,000	7.3%	\$6,816,149
Fleet Management	460.35	\$17,080,759	30%	\$37,104	3.00	\$312,000	3.7%	\$5,124,228	30.2%	57,544	\$1,150,875	31.5%	\$23,667,862
Facilities Management	769.00	\$29,331,929	52%	\$38,143	71.20	\$7,404,800	88.8%	\$8,799,579	51.8%	96,125	\$1,922,500	52.6%	\$47,458,807
Equipment Management	126.70	\$5,266,097	9%	\$41,564	4.50	\$468,000	5.6%	\$1,579,829	9.3%	15,838	\$316,750	8.7%	\$7,630,676
<b>Total</b>	<b>1,462.05</b>	<b>\$56,602,130</b>	<b>100%</b>	<b>\$38,714</b>	<b>80.15</b>	<b>\$8,335,600</b>	<b>100%</b>	<b>\$16,980,639</b>	<b>100%</b>	<b>182,756</b>	<b>\$3,655,125</b>	<b>100%</b>	<b>\$85,573,494</b>

**Administrative Management FTE's Resources by Business Process****Administrative Management Total Cost by Business Process****Administrative Management Cost by Business Process as a % of Total Cost****Administrative Management Salaried FTE vs. Contractor FTE****Administrative Management Cost by Category as a % of Total Cost**

## Supporting Technology

State agencies maintain a range of specialized technologies to assist them in managing their administrative and support tasks. The survey data indicates that in most agencies Administrative Management is a supporting activity and not the primary role of the organization. Therefore, very few agencies actually own or maintain specialized systems to support these processes. In agencies where administrative service levels are reasonably high agencies have licensed or developed specialized applications to lower cost, improve productivity, and enhance service levels. The following administrative technology applications have been identified by the survey respondents.

- Equipment Management Systems
- Real Property and Leasing Systems
- Fleet Management Rental Car Reservation System
- Vehicle Maintenance Systems
- Inventory Management Systems

## Equipment Management (437.10)

Equipment Management involves the maintenance, administration, and operation of machinery and other capital assets that are possessions of the state government (excluding information technology assts).

Equipment Management in the Commonwealth is highly decentralized and is the responsibility of each individual agency. Other than the requirement to post equipment assets of \$5000 or more to the FACCS Fixed Assets System, there are not any state level policies or guidelines for Equipment Management. The information contained within this section is based upon Foundation Interviews with 6 agencies and online survey information submitted by 30 agencies.

A wide array of equipment categories were reported from the survey agencies. Office equipment is by far the most common. Other equipment included sophisticated laboratory and testing equipment, patient care equipment, vehicles, shop equipments, cooking equipment, law enforcement equipment, instructional equipment, and construction equipment.

The data collected through the Foundation Interviews and the online survey suggests that there is a wide range of Equipment Management needs. For agencies that have limited equipment types or have immobile equipment at fixed locations the current Fixed Asset System (FACCS) is adequate for their needs.

On the other extreme are agencies such as the Department of Transportation (with 33,000 pieces of equipments) and the State Police that have extensive equipment management needs. These agencies have large quantities of equipment deployed throughout the Commonwealth. Also, a portion of their equipment has a fixed location while other equipment is mobile and subject to reassignments. These agencies also have a greater need for tracking equipment history, establishing preventative maintenance programs, accounting for chargeback systems, and warranty management.

Just over half the agencies surveyed are those with equipment management needs that exceed traditional fixed asset systems, but do not warrant, due to limited size and volume, the investment in an Equipment Management System. While the larger agencies would clearly benefit from having access to a more modern web-based Equipment Management system, it is the majority middle where the benefits would be most realized. This majority middle is where spreadsheets, local data bases, paper logs, and individual knowledge capture are currently utilized most frequently.

### As-Is Environment: Strengths

Particular strengths of the Commonwealth's Equipment Management environment include the following:

- **Equipment tracking.** All the agencies reported some method for tracking equipment. There is an assortment of criteria to determine what equipment is tracked. Some adhere to the DOA rule of \$5000 while others such as State Police track all equipment to a specific officer or facility. Approximately 60% of the surveyed agencies track all equipment.



- **Equipment location tracking.** The vast majority of agencies (92% of surveyed agencies) track equipment location information. Some agencies, such as DMH, have indicated that there are process issues with keeping this information current.
- **Warranty tracking.** The majority of agencies (70% of surveyed agencies) track warranty information.
- **Work Order Policies.** The majority of agencies (74% of surveyed agencies) have an approval process for equipment work orders information.
- **Equipment identification.** Most agencies (66% of surveyed agencies) reported the use of using equipment tags (number or bar code in some cases such as DGS for scientific equipment). VDOT indicated that they continue to reconcile equipment that may have a FACCS and VITA equipment tag. This ongoing effort will eliminate duplication of equipment asset inventory.
- **Equipment accountability.** A responsible party (end user, manager, or equipment coordinator) has been assigned to each piece of equipment in 100% of the responding agencies.

## As-Is Environment: Weaknesses

Equipment Management in the Commonwealth has particular weaknesses in the following areas:

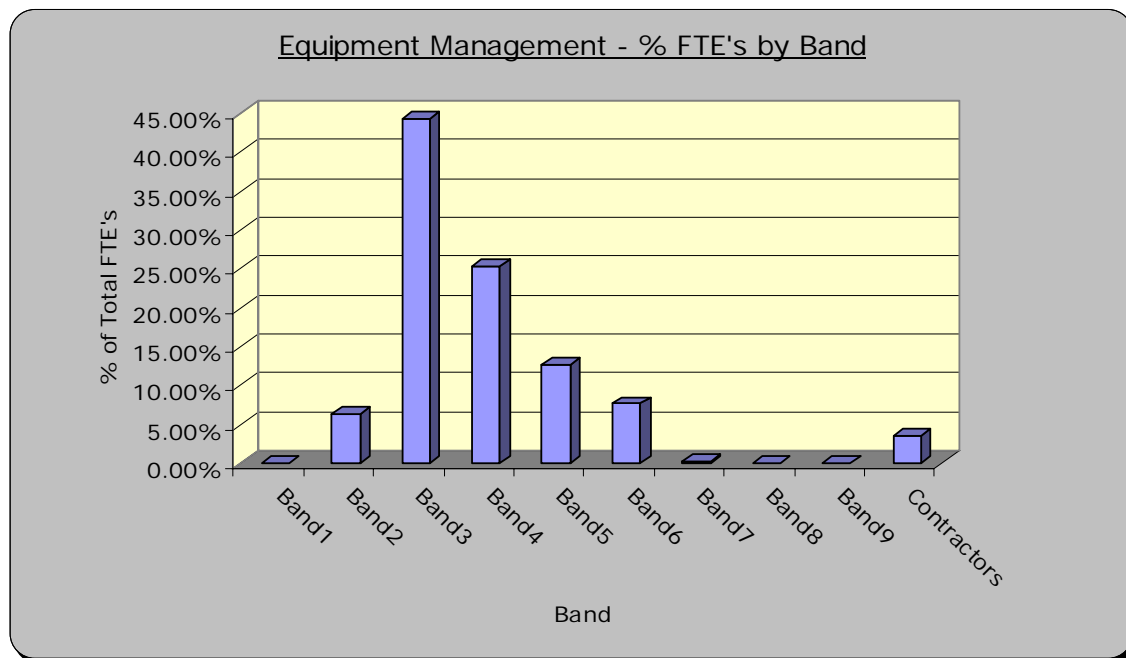
- **Lifecycle approach to equipment management.** The majority of agencies (65% of surveyed agencies) do not have a lifecycle approach for maintaining equipment.
- **Automated equipment management system.** The majority of agencies (63% of surveyed agencies) do not have automated equipment management systems. Most agencies use assorted systems in order to manage equipment.
- **No standard replace-repair policies.** The majority of agencies (78% of surveyed agencies) do not have a policy for determining equipment repair versus replace.
- **Maintenance management.** Many agencies (42% of surveyed agencies) do not monitor equipment repair or maintenance work in progress and report time against it.
- **Equipment scheduling.** For the few agencies that schedule equipment usage only 17% of responding agencies utilize an automated process to reserve and schedule equipment use.
- **Use of tracking technologies.** Limited use of bar code for equipment tracking.
- **Redundant data entry.** Amongst the agencies that responded, the amount of duplicate entry varied from 1% to as high as 20% with average of 5% across the respondents.
- **Equipment surplus and disposal.** A number of agencies commented on the difficulty of surplus and disposing of equipment.
- **Warranty information is not consistently recorded and tracked.** Approximately 76% of the agencies that responded track equipment warranty. Of those that track warranty 39% track in manually. With such a high number of agencies not tracking warranty and a large number tracking it manually the effectiveness of the Commonwealth's warranty management is questionable. Effective warranty management is a key indicator of total cost of ownership management.

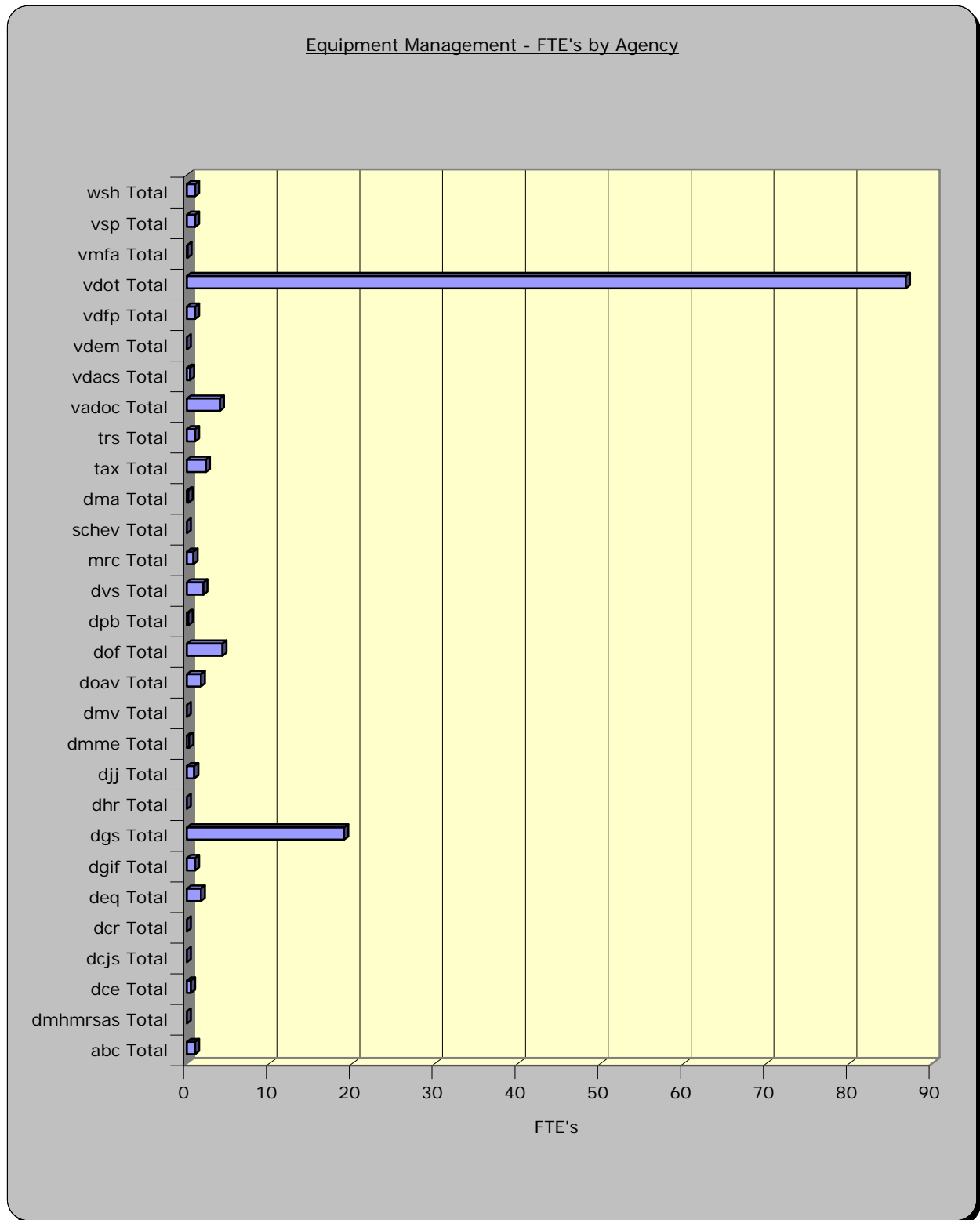
## As-Is Environment: Resources Required

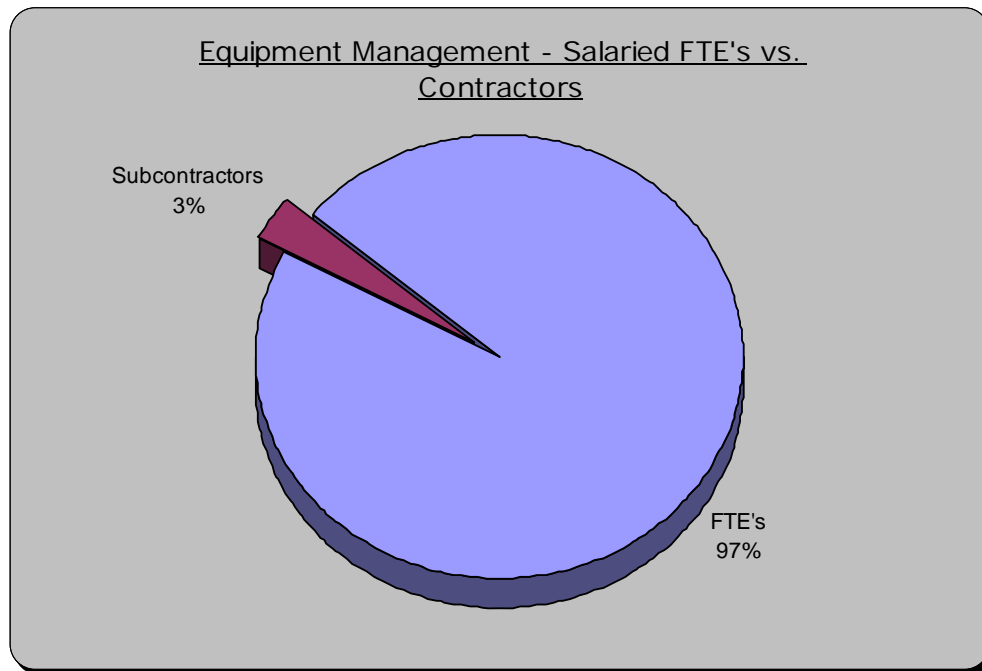
### Human Resources

All agencies responding to the survey reported some level of FTE's supporting the Equipment Management processes. The lowest reported level of effort was VMFA with .0.1 FTEs. The highest reported level of effort was VDOT with 86.8 FTEs. The average FTEs per agency was 4.5 FTEs. These resources are clustered in the lower bands of the Commonwealth's salary structure. Exhibit 5 summarizes the resource information provided by agencies participating in our survey. Exhibit 6 depicts the distribution of these resources among agencies. Contractors play a minor role in supporting this process, depicted in Exhibit 7..

**Exhibit 5      Equipment Management Resources**



**Exhibit 6      Distribution of Equipment Management Resources by Agency**

**Exhibit 7      Utilization of Contractors in Equipment Management****Technology Resources**

Agencies have invested in a variety of applications to track and manage equipment. These applications range from sophisticated agency-level systems, locally maintained spreadsheets and small databases, to Commonwealth enterprise level applications. Agencies with large quantities of equipment and complex maintenance requirements such as VDOT and DMH use high-end Equipment Management systems while agencies with low equipment volume such as DOAV and DPB solely use FACCS. There are a large number of agencies between these two extremes that use a variety of systems (often piece meal) to meet their needs. Exhibit 8 shows a partial list of applications used throughout the Commonwealth.

**Exhibit 8      Equipment Management Applications in Use**

	FACCS	LAS	An Equipment Management System	Spreadsheets or Access Databases	Manual Records
Number of agencies reporting usage of these systems	17	4	3	10	16

In some cases, accessing data for reporting and analysis is very difficult. VDOT in particular must accumulate and reconcile equipment information from more than a half dozen different systems.

## To-Be Preliminary Assessment

### Commonwealth Recommendations

From the interviews and the surveys we captured the Commonwealth's vision of the future state of Equipment Management. All of the recommendations captured below can be accommodated today by implementing an integrated Equipment Management solution.

- Expanded use of Bar Code (or other) technology for equipment tagging and to reduce inventory effort.
- Improved equipment replacement planning which can also be used as input into agency budget planning.
- A single statewide equipment management system which includes warranty tracking.
- Improved process for retiring and disposing of outdated equipment.
- Automated scheduling and tracking of Preventative Maintenance activities.
- Ability to apply fully burdened costs to a Work Order (Overhead, labor, materials, etc).
- Ability to capture true life cycle costs of an asset.
- Integration with procurement processes to increase the efficiency of identifying assets for capitalization and tracking.
- Improved processes and accountability for maintaining responsible party and equipment location (relocation) information.
- A system that assists with equipment planning and management, including budgeting.
- Standard policies addressing equipment management, equipment replacement, maintenance, internal controls, risk management, etc.
- Integration to FACCS.
- Implementation of a predictive maintenance program.
- Increased use of contracted maintenance.
- No redundant equipment management efforts.
- Simple process for declaring surpluses and online visibility to surplus equipment within agencies.
- Easy method for requesting equipment maintenance.
- Take advantage of volume vendor maintenance and repair agreements.
- Ability to determine benefit of repair versus replacement of equipment.
- Provide service call history.

We recommend that the Commonwealth consider the following steps:

- The Commonwealth should establish common policies, procedures and guidelines for Equipment Management. This would establish a common baseline that all agencies would adhere to and result in improved efficiency across the enterprise.
- Based on financial consideration for not exceeding maintenance and repair budgets, a common best practice is to approve all work orders. Of the agencies surveyed, 80% reported

having a work order approval process while only 13% have an automated method for tracking and managing work orders once approved.

- Preventative maintenance programs should be formalized, automated, have defined performance schedules, and be monitored (for equipment that requires such maintenance) in order to extend the useful life and lower the total cost of ownership. Just over 73% of agencies surveyed reported proactive maintenance programs. However the data collected does not validate compliance.

### Consistency with Best Practices

On average, the survey indicated that approximately 50% of maintenance is currently proactive.

A key indicator of a successful maintenance program is the percentage of proactive maintenance versus reactive repair. Industry standards vary, but in general targets for key equipment categories are shown in Exhibit 9.

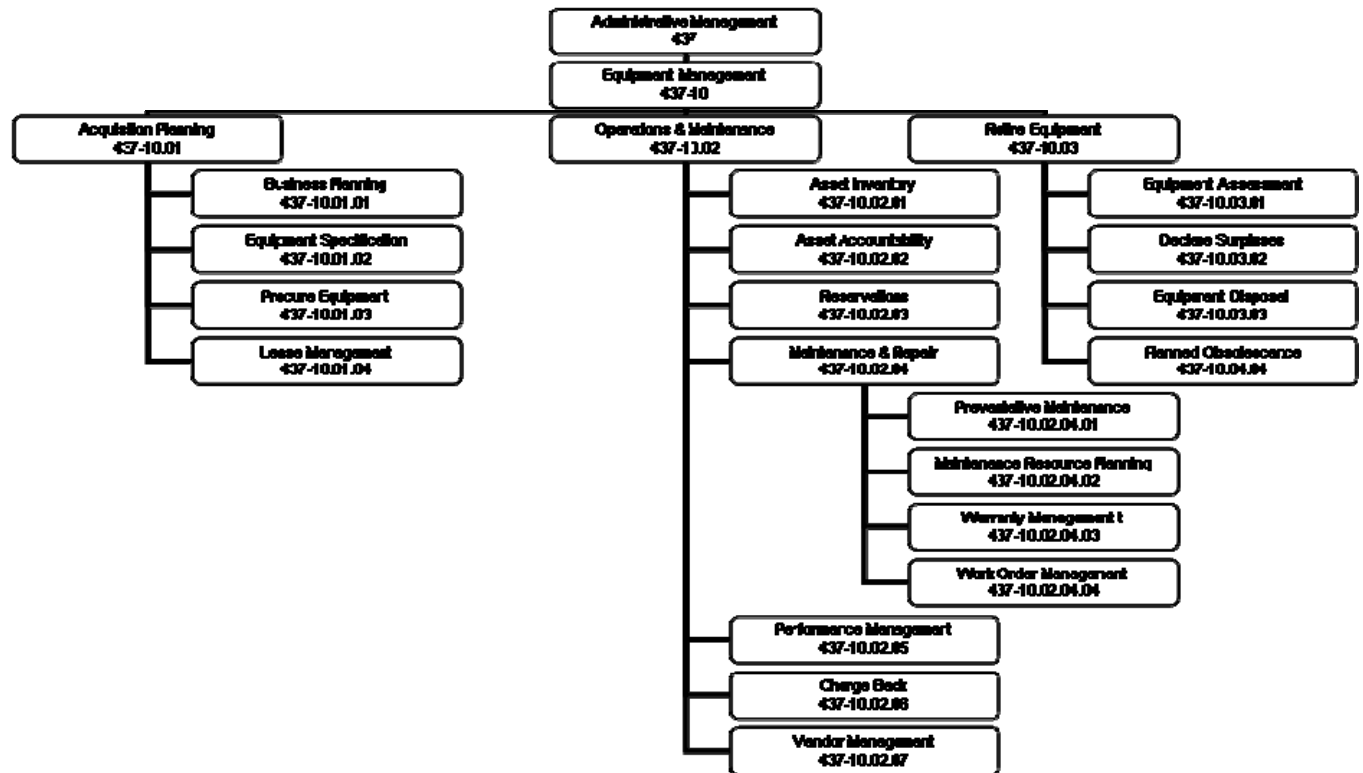
***Exhibit 9 Maintenance Targets by Key Equipment Categories***

	Percentage of Proactive Maintenance		
	Low	Medium	High
Fleet	65%	75%	85%
General Equipment	70%	80%	90%
Facilities	75%	85%	95%

Approximately 45% of the agencies surveyed reported having a life-cycle approach to Equipment Management. Agencies should develop a life-cycle strategy that incorporates equipment strategy (requirements), planning (budget), evaluate/design (what to buy or build), procure (acquire), operate (putting into use), maintenance (extending useful life), modify (update or replace) and disposal (reducing equipment inventory).

### Business Process Decomposition

The Equipment Management process is composed of several sub-processes, as depicted in Exhibit 10 below.

**Exhibit 10 Business Function Decomposition**

## Survey Results

Appendix A provides a set of two summary reports per business function studied in Administrative Management. The first report shows response frequencies on questions selected to illustrate trends on particular management practices (these are multiple choice questions, so the results can be aggregated and graphed). The second report shows the set of responses on text questions, so that the range of views is reflected (these questions have responses easily displayed in a list format). The remaining survey questions are in a matrix format best understood in the individual survey response, so they are not included in the aggregate or grouped responses shown in these two reports. To view all responses to every question by survey, please view the reports included on the accompanying CD.

## Facilities Management (437.20)

Facilities Management involves the maintenance, administration and operation of office buildings, other buildings and parking facilities that are owned or leased by the state government.

The Commonwealth owns or leases a vast array of properties. The Commonwealth's portfolio includes approximately 360,000 acres of land, 13,000 buildings and 117 million square feet of space. In addition, the Commonwealth has approximately 1,500 leases for an additional 14 million square feet of office space.

The Commonwealth is working to centralize control over the acquisition and utilization of facilities. There are mature policies and processes for managing state-owned space. The Commonwealth is working to implement similar controls for the management of leased space. Other aspects of Facilities Management, such as interior space planning, renovations, housekeeping and building maintenance are highly decentralized. Agencies vary in the scope and complexity of their Facilities Management operations based upon their missions.

### As-Is Environment: Strengths

- **Comprehensive reengineering of facilities management processes.** Current executive orders provide the direction for making comprehensive changes in the way real estate and facilities are managed.
- **Consistent management processes.** The oversight of processes for managing Commonwealth-owned real estate is highly centralized. As a result, policies appear to be consistently implemented across agencies.
- **Consolidation of lease management.** The Commonwealth is implementing processes and organizational changes to better control the acquisition and utilization of leased space.
- **Housekeeping for state-owned facilities.** Agencies are generally satisfied with the quality of services and maintenance they receive from either DGS or their landlord, in the case of leased property.
- **Improving management efficiency.** Large agencies have invested resources in property management systems to monitor the material condition of state-owned facilities and to track and prioritize maintenance investments. Agencies are also experimenting with new technologies to improve the efficiency of maintenance.

### As-Is Environment: Weaknesses

- **Construction project documentation requirements.** The documentation requirements associated with the Capital Outlay process are perceived as cumbersome. In some cases, these requirements conflict or duplicate other documentation requirements.
- **Duplicate data.** There is no single authoritative source of information that identifies and describes state-owned facilities. There is duplicative and probably inaccurate information in numerous systems. Each system is designed to address a specific agency reporting or administrative requirement.

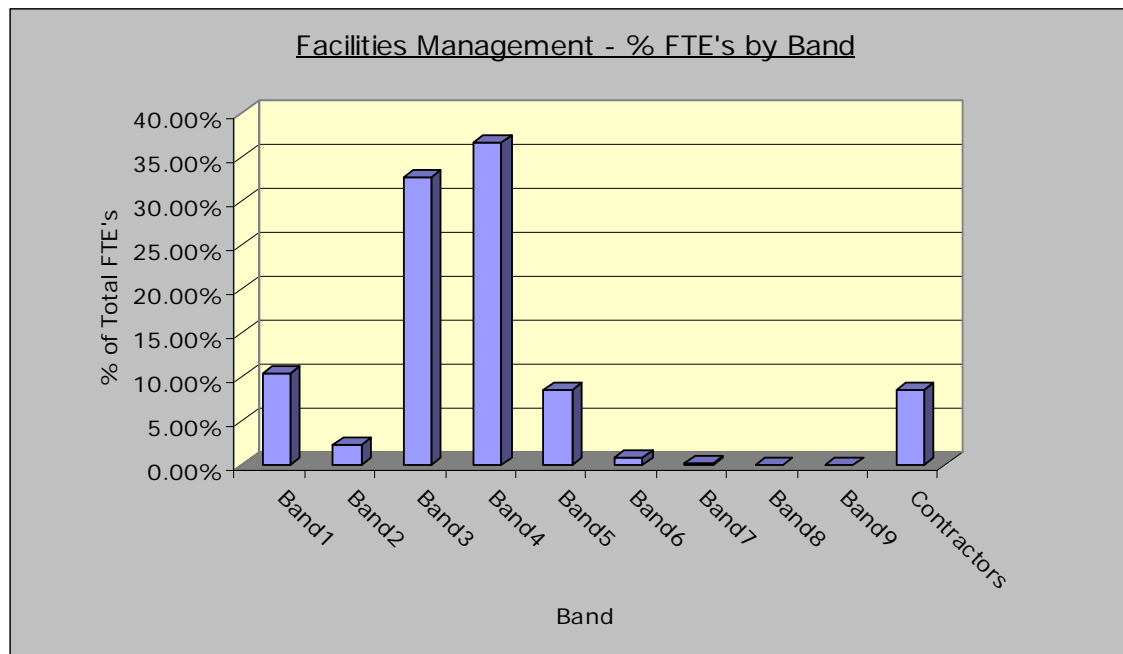


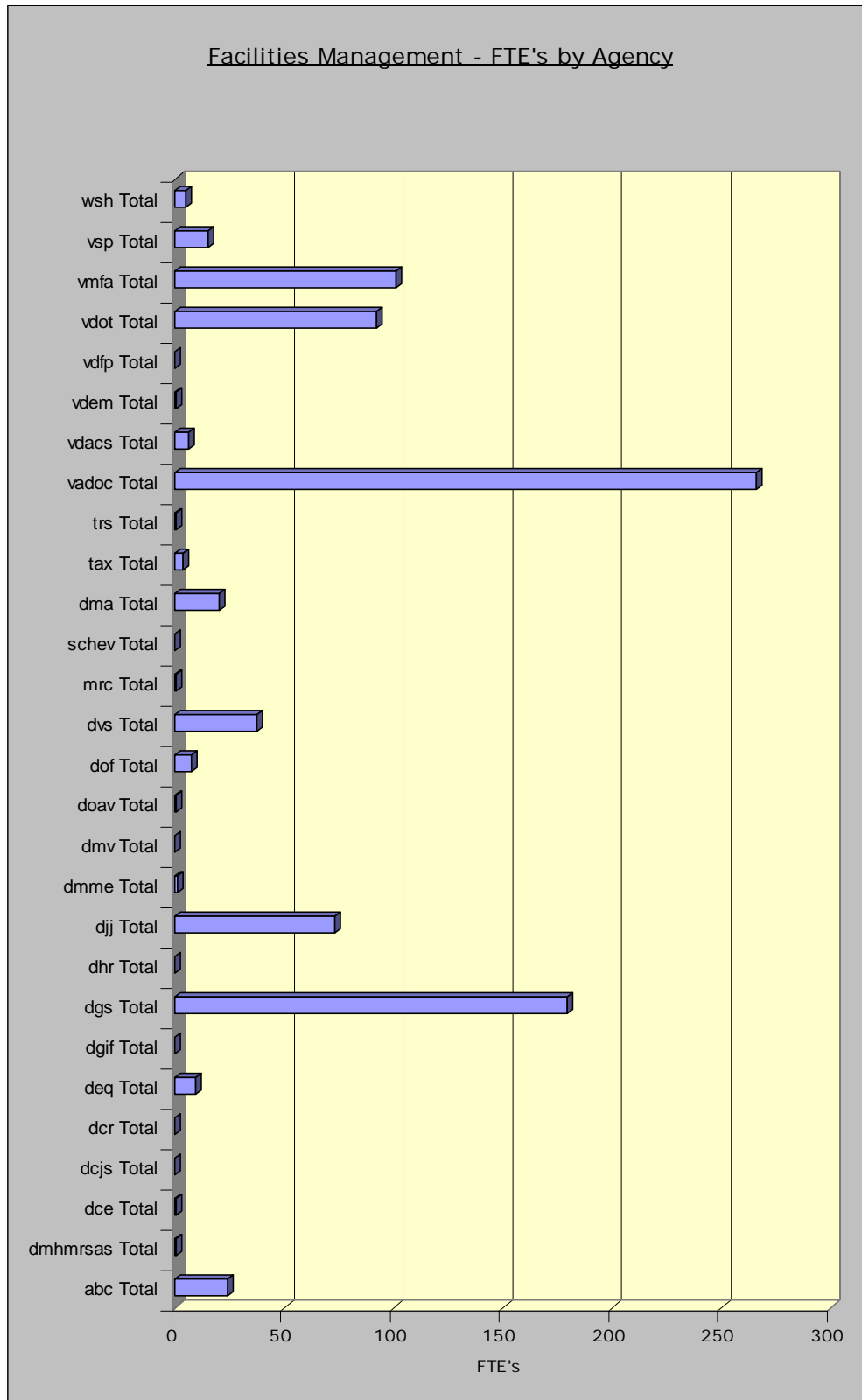
## As-Is Environment: Resources Required

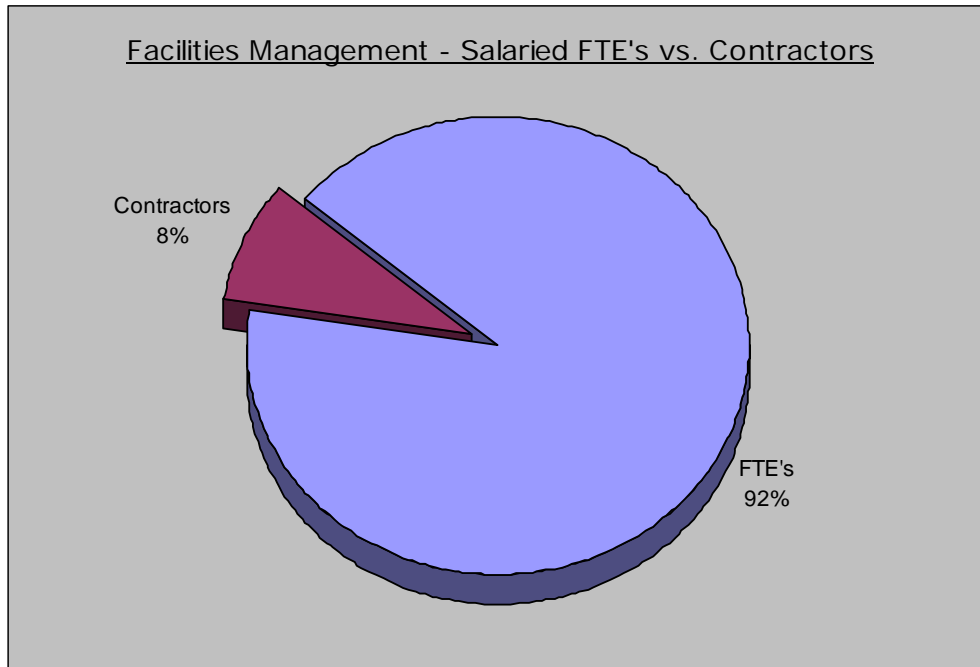
### Human Resources

Relatively few resources are devoted to Facilities Management. As depicted in Exhibit 11, these resources are largely concentrated in the lower salary bands. These resources are widely distributed among agencies. However, as shown in Exhibit 12, Facilities Management resources are largely concentrated in DGS and VADOC. Exhibit 13 reveals that the vast majority of Facilities Management work is performed by Commonwealth employees. Contractors play a minor role.

**Exhibit 11**      **Facilities Management Resources**



**Exhibit 12      Distribution of Facilities Management Resources by Agency**

**Exhibit 13      Utilization of Contractors in Facilities Management****Technology Resources**

Agencies have invested in a variety of applications to track and manage facilities. These applications range from sophisticated agency-level systems to locally maintained spreadsheets and small databases. Here is a partial list of applications used throughout the Commonwealth.

- FAACS
- VAPS
- LAS
- Risk Management
- Various agency ERP systems
- DOF
- PLATS
- Various agency property management systems
- Local databases and spreadsheets

**To-Be Preliminary Assessment**

Agencies see themselves as customers of DGS's processes for procuring facilities space. Our survey results suggest that agencies are generally satisfied with the level of support they currently receive.

## Commonwealth Recommendations

- **Establish an authoritative source for information about state-owned and leased facilities.** The Commonwealth should consider implementing a common database for tracking information about state-owned real estate, facilities and leased properties.
- **Implement a common property management system.** Agencies with significant facilities portfolios have implemented a variety of systems for managing maintenance.

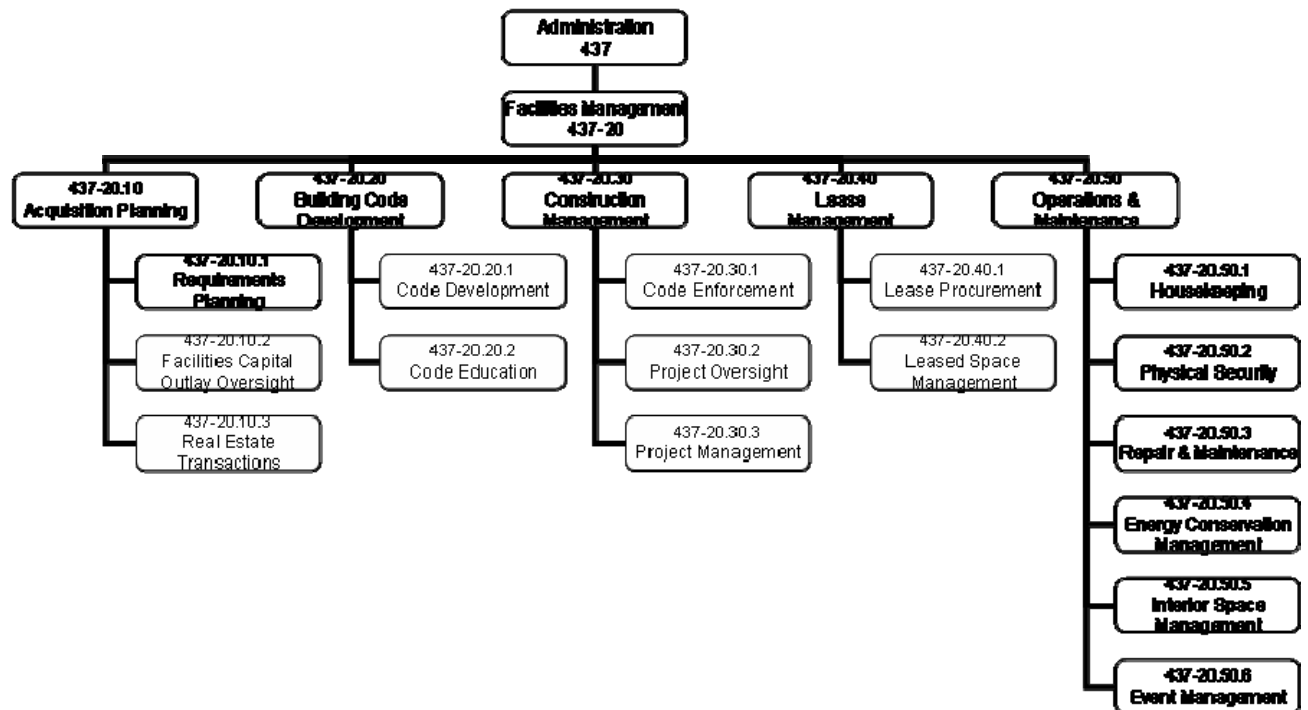
## Consistency with Best Practices

These recommendations are consistent with industry best practices.

## Business Process Decomposition

Facilities Management is composed of the following sub-processes described in Exhibit 14.

**Exhibit 14 Business Process Decomposition**



## Survey Results

Appendix A provides a set of two summary reports per business function studied in Administrative Management. The first report shows response frequencies on questions selected to illustrate trends on particular management practices (these are multiple choice questions, so the results can be aggregated and graphed). The second report shows the set of responses on text questions, so that the range of views is reflected (these questions have responses easily displayed in a list format). The remaining survey questions are in a matrix format best understood in the

individual survey response, so they are not included in the aggregate or grouped responses shown in these two reports. To view all responses to every question by survey, please view the reports included on the accompanying CD.

## Fleet Management (437.30)

Fleet Management involves the maintenance, administration, and operation of fleets (cars, trucks, aircraft, watercraft, etc.) that are owned or leased by state government.

Over 20,000 vehicles are owned by the Commonwealth, obtained at a cost of over \$450 million, and requiring more than \$40 million annually to maintain. In addition, almost \$12 million per year is spent for reimbursements to employees for business use of their own vehicles.

There are many types of vehicles owned by the Commonwealth. They are broken down into two main categories: passenger and non-passenger. Passenger vehicles include cars, vans, station wagons, and sport utility vehicles. Non-passenger vehicles include trucks and all other vehicles.

The Code of Virginia states that all passenger-type vehicles purchased with public funds by any State agency, institution, or employee must be assigned to the centralized fleet (controlled by DGS). DGS controls passenger vehicles in general, and leases approximately 4,000 passenger cars and minivans (about 2,000 in the Richmond area) to other agencies. All DGS cars are pooled and on a wet lease. Maintenance for DGS vehicles is provided by DGS Fleet Management, university and public bodies service areas and VDOT. VDOT services are directly billed through the EMS system.

However, the Code also states that there are four categories of vehicles that are exempt from this requirement:

- Vehicles that have special equipment or performance requirements for use by law-enforcement officers
- Vehicles that are used by elected officials
- Vehicles owned by the Virginia Department of Transportation
- Any other special category of vehicle designated by the fleet administrator.

Exemption category particulars:

- The State Police own and maintain over 2600 police vehicles, as well as 130 other vehicles, and 11 aircraft.
- There are a relatively small amount of vehicles used by elected officials.
- The Virginia Department of Transportation owns almost 6,000 vehicles. (They service over 34,000 pieces of equipment, of which approximately 9,000 are considered Rental Equipment units. Rental equipment consists mostly of trucks, construction equipment, and off-road vehicles. The other 25,000 units are what would more commonly be referred to as equipment, as opposed to vehicles.)
- Other vehicles including SUV's (SUV's and non-passenger vehicles are not provided by the centralized fleet), owned by agencies, consisting of approximately 7,500 additional vehicles.

Virtually all other agencies own at least one vehicle and some have significant fleets (100 or more vehicles). Exhibit 15 summarizes the quantities of vehicles that are not assigned to the Centralized Fleet.

**Exhibit 15      Agency Owned Passenger-Type Vehicles not assigned to the Centralized Fleet  
(JLARC Report, FY2003)**

<b>Agencies and Institutions</b>	<b>Number of Vehicles</b>
Department of State Police	1,936
Department of Corrections	595
Virginia Tech	325
Department of Game and Inland Fisheries	249
Department of Alcoholic Beverage Control	182
Department of Transportation	164
Department of Mines, Minerals, and Energy	139
Department of Mental Health, Mental Retardation, and Substance Abuse Services	106
Other Agencies and Institutions	757

### As-Is Environment: Strengths

- **EMS.** Existing VDOT Equipment Management system is an in-house developed, mainframe based system. It works well for collection and reporting of data used for inventory and repair/maintenance of VDOT vehicles.
- **Appropriate use.** The JLARC study found that the policies in the Code of Virginia, executive orders, and Fleet Management regulations are effective. During FY2003, there were only 20 complaints from citizens, three complaints concerning misuse, the rest being accusations of employees speeding or driving recklessly.
- **Centralized procurement and management.** Ownership of passenger vehicles is mostly centralized under DGS. This frees many agencies from the overhead of the lifecycle activities of maintaining a fleet.
- **Fuel cards.** The Voyager fleet fuel card is used by DGS, VDOT and other DGS approved agencies. This allows better control over fuel expenses. The cards can be assigned to individuals or vehicles.
- **Agency satisfaction with fleet availability.** Agency employees are generally satisfied with the amount, types, and quality of fleet vehicles. Agency employees are not handicapped performing their responsibilities because of fleet shortcomings.
- **Maintenance Control Center.** DGS is implementing a maintenance control center to manage preventive and unscheduled repairs for its fleet.

### As-Is Environment: Weaknesses

- **KPIs.** Most agencies do not have key performance measures/indicators for Fleet Management. Approximately 78% of agencies surveyed do not have KPIs
- **Lifecycle approach.** Most agencies (70% of surveyed agencies) do not have a fleet lifecycle approach within the organization. This prevents analysis of vehicle type, where another vehicle might be more cost-effective. Also, there is no accurate data to review the rental rate structure and the minimum mileage criteria for fleet vehicles.

- **Tracking personal mileage reimbursements.** This is not currently tracked. There may be cases where usage of a fleet vehicle is more cost effective.
- **Commuting fees.** Many employees do not reimburse the Commonwealth for commuting fees. The Commonwealth needs to charge employees the appropriate fee for commuting in a Commonwealth-owned vehicle.
- **Minimum mileage requirements.** There may be fleet vehicles that should be recalled because they did not travel enough miles to justify their continued usage.
- **Oversight.** Reviews are not thorough concerning purchase requests, and nearly all requests are approved.
- **Scheduling.** There is little current ability to track/schedule maintenance. It would be useful to be able to schedule preventive and predictive maintenance.
- **Recalls.** There is no systematic way to be able to react to recalls. When recalls occur, a means to schedule and track completion would be beneficial
- **Analysis.** Data for repair/replace analysis. Data is not captured in order to support repair/replace analysis. If it were available, analysis might yield different repair/replace recommendations.
- **Tracking.** Enterprise wide labor/parts numbering system is needed. There is a need for a consistent labor/parts numbering system to identify repair and maintenance activities down to the assembly level for repair history data. VDOT Equipment (Fleet) Management plans to implement the use of the American Trucking Association Vehicle Maintenance Repair Schedule (VMRS) Codes. Standardization of the reporting of these repair activities will improve data collection and reports results.
- **Maintenance tracking.** Most agencies (60%) track maintenance history on each vehicle manually.
- **State Police vehicles, of which there are a large number, are maintained by the trooper to which they are assigned.** Almost half of the agencies do not have an approval process for fleet maintenance work. Most agencies (93% of surveyed agencies) do not have an independent fleet work order planning function.

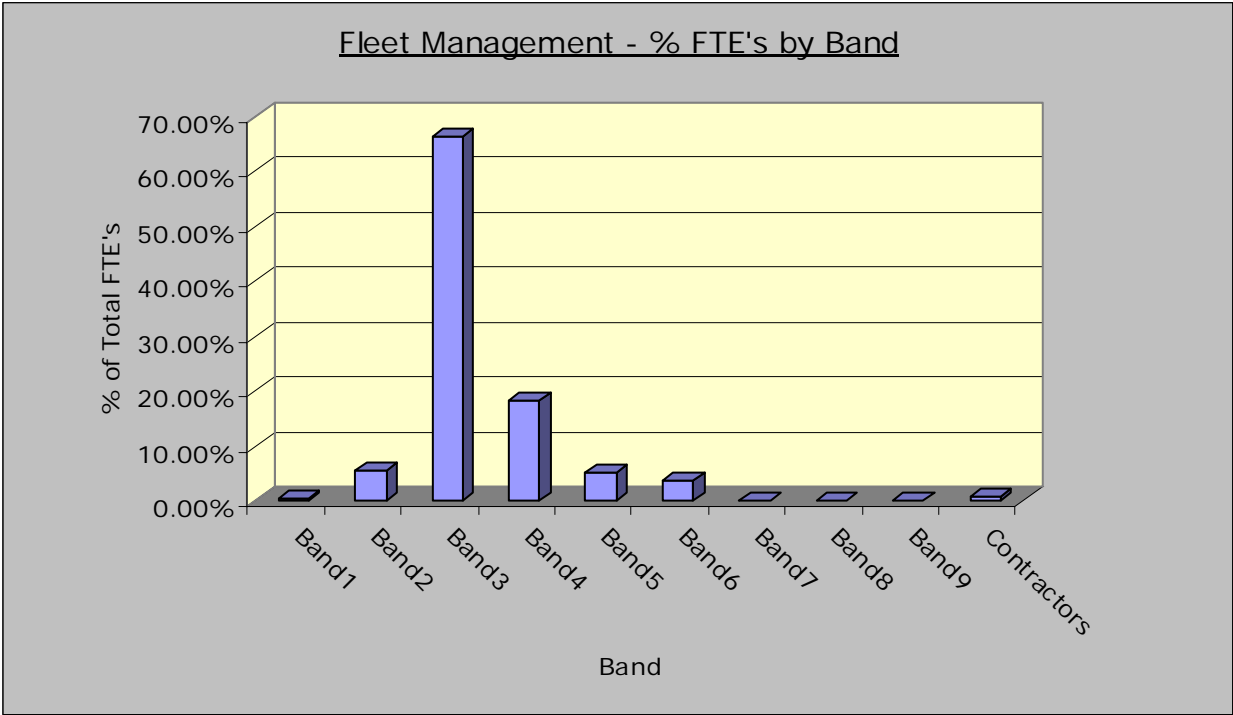
## As-Is Environment: Resources Required

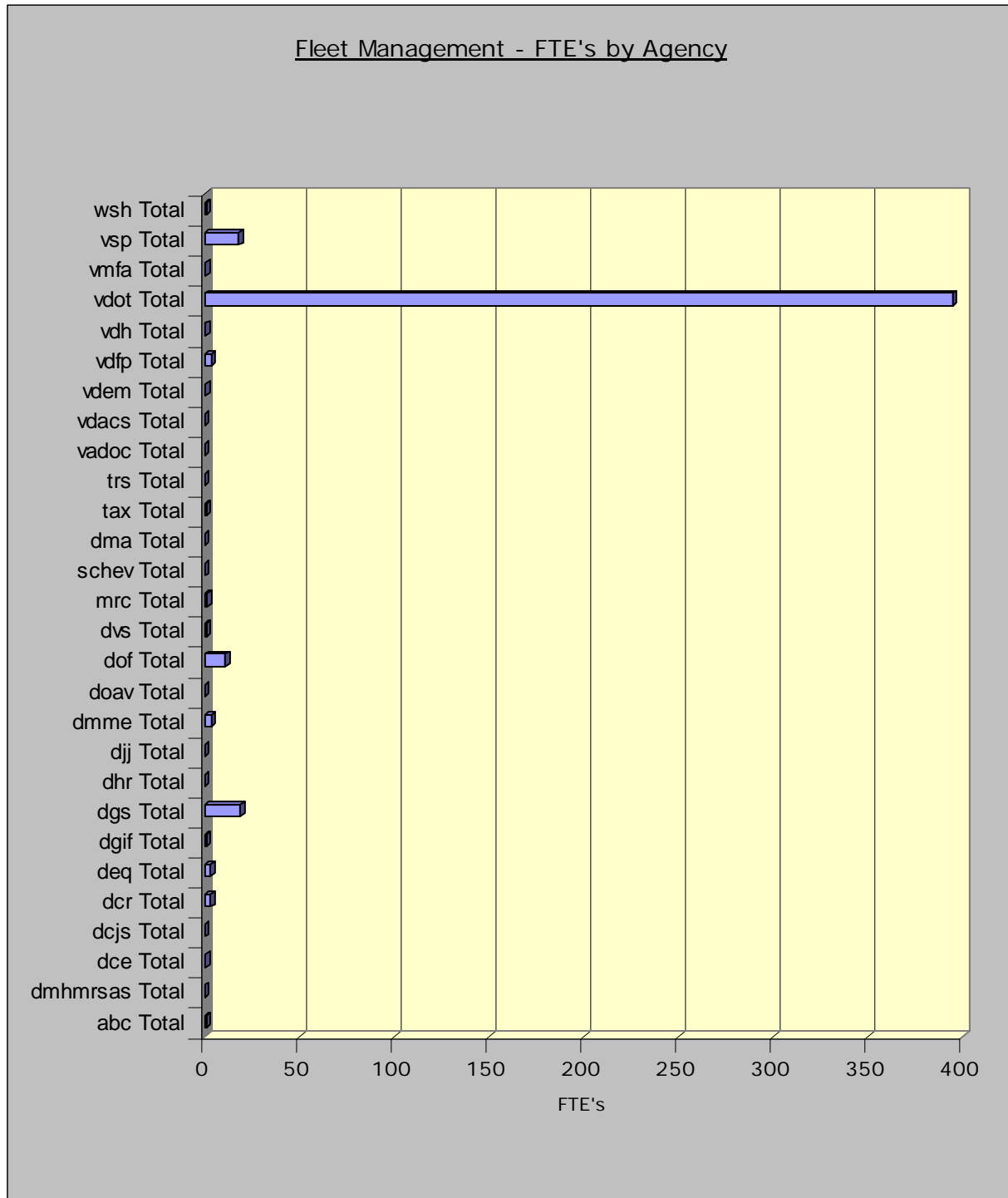
### Human Resources

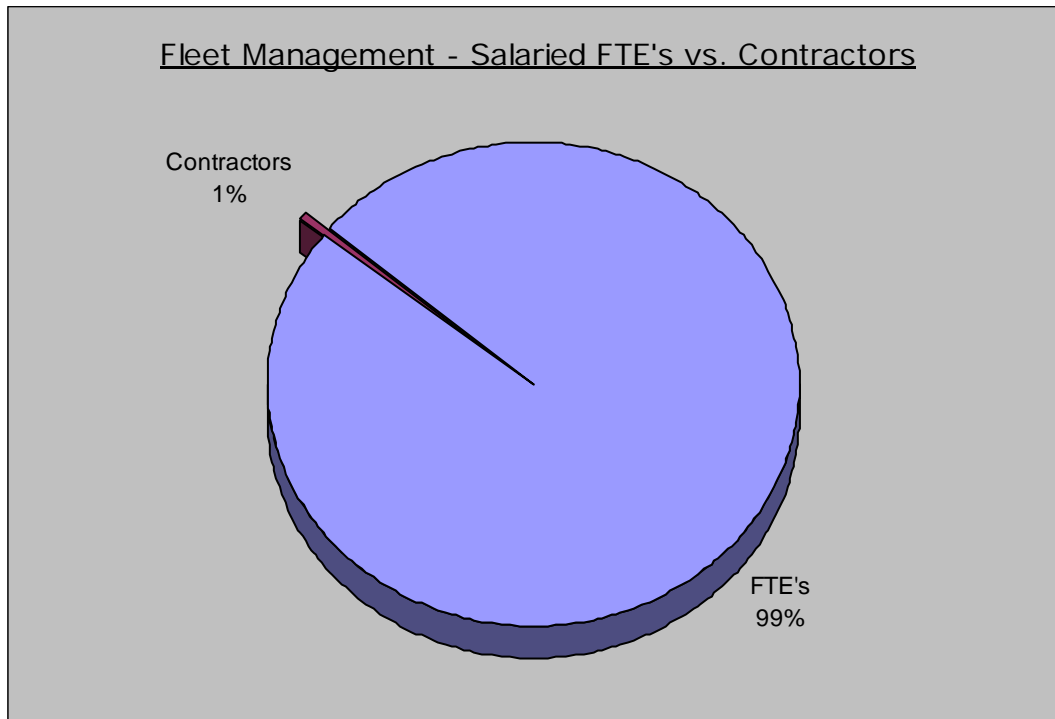
With the exception of VDOT and DGS, agencies devote relatively few resources to Fleet Management processes. These resources generally fall within the lower bands of the Commonwealth's salary structure. Exhibit 16 summarizes the distribution of these resources by band. Exhibit 17 summarizes the distribution of Fleet Management resources across agencies. Staffing is currently concentrated in VDOT, with some significant headcount in DGS, VDFP, and VSP. The use of contractors to support agency Fleet Management processes is negligible. Contractor utilization is summarized in Exhibit 18.



**Exhibit 16     Fleet Management Resources**



**Exhibit 17     Distribution of Fleet Management Resources by Agency**

**Exhibit 18 Contractor Utilization in Fleet Management****Technology Resources**

There are several systems currently being used to manage portions of the Commonwealth's vehicle fleet. These systems include:

- FAACS
- Mapper
- Equipment Lease Accounting
- REBS
- Asset Management System
- FMS II
- Faster
- WEBIF
- EMS
- Peoplesoft Financials

Agencies alluded to experiencing difficulties in generating reports necessary to monitor inventory, maintenance activities and costs. Some of these systems utilize older technologies which compound the complexity of reporting. As a result, GASB 34 reporting has been difficult to implement.

We understand that DGS is implementing Faster as its platform for managing fleet passenger vehicles state-wide. We anticipate that many of the issues associated with the current technical environment will be addressed as part of this transition.

## To-Be Preliminary Assessment

### Commonwealth Recommendations

- These recommendations were identified through our survey:
  - Electronic fleet management system tying assets, purchasing, payables, etc. together
  - Better oversight of maintenance schedules
  - Automated maintenance tracking
  - Better tracking of maintenance costs
  - The ability to analyze repair/replacement cost
- From the APA *Statewide Review of Agency-Owned Vehicles*, a number of issues and recommendations were identified:
  - Lack of a unified, reliable data source referencing all vehicles.
  - Limited regulations governing agency-owned passenger vehicles
  - No regulations governing non-passenger vehicles. (Recommend creation of rules for non-passenger vehicles)
  - Recommend that agencies develop internal policies and procedures for all vehicles
  - Most agencies have inadequate control of vehicle assignment, use, and maintenance.
  - None of the agencies surveyed in this study performed a cost-benefit analysis to determine whether use of a vehicle from the Centralized Fleet was more effective. A process to develop and document a cost-benefits analysis for agencies should be implemented.
  - Each agency owning vehicles should develop and document internal policies and procedures for maintaining those vehicles. These policies should include a preventative maintenance schedule and methodology for tracking vehicle maintenance and the related expenses.
  - Voyager fuel card usage should be monitored by DGS
  - State Police should improve the reliability of its data.
  - State Police should develop and document a methodology for tracking the assignment status of vehicles and the equipment installed in each vehicle.
  - State Police should develop an adequate method to record all maintenance information and track expenses by vehicle. (none currently in place)
- From JLARC's *Review of the State's Passenger Fleet*, a number of recommendations were identified. It noted that DGS should improve oversight in several ways:
  - Track personal mileage reimbursements (more employees could have saved money by using fleet cars)
  - Charge employees appropriate fee for commuting in a state owned vehicle.
  - Fleet vehicles with too few miles should be recalled.

- Analyze lifecycle costs to ensure the fleet is composed of the most cost effective vehicles.
- DGS was unable to provide accurate data to enable a review of the current rental rate structure
- DGS should perform more than a cursory review of agency vehicle purchase requests (It approves nearly all, many of which are for SUVs, which are not provided by the centralized fleet and are more expensive to purchase and maintain. Since the oversight of agency owned vehicles is limited, DGS should assign SUVs to agencies through the centralized vehicle fleet.).
- Provide better vehicle operator training and effectively distribute safety information. This is projected to minimize misuse of State-owned vehicles and bring the accident rate down.
- Make training mandatory concerning the appropriate use of fleet vehicles. (41% of permanently assigned vehicle operators reported they received no training on the proper use of fleet vehicles, and 13% reported that they never reviewed Fleet Management rules and regulations.)
- There is a lack of reliable data due to technical problems with the VDOT information system that stores vehicle maintenance expenses. If this data is provided, it could enable assignment of vehicles to agencies only when it is cost effective; enable vehicles to be recalled from agencies when it is more cost effective to reimburse employees for mileage traveled in personal vehicles; enable replacement of vehicles when it is not cost effective to repair and maintain them; ensure rental rates charged to agencies are commensurate with the costs of using them; help with enforcement of fleet vehicle utilization thresholds. It was also noted that maintenance could be outsourced, and vehicles could be purchased instead of leased.

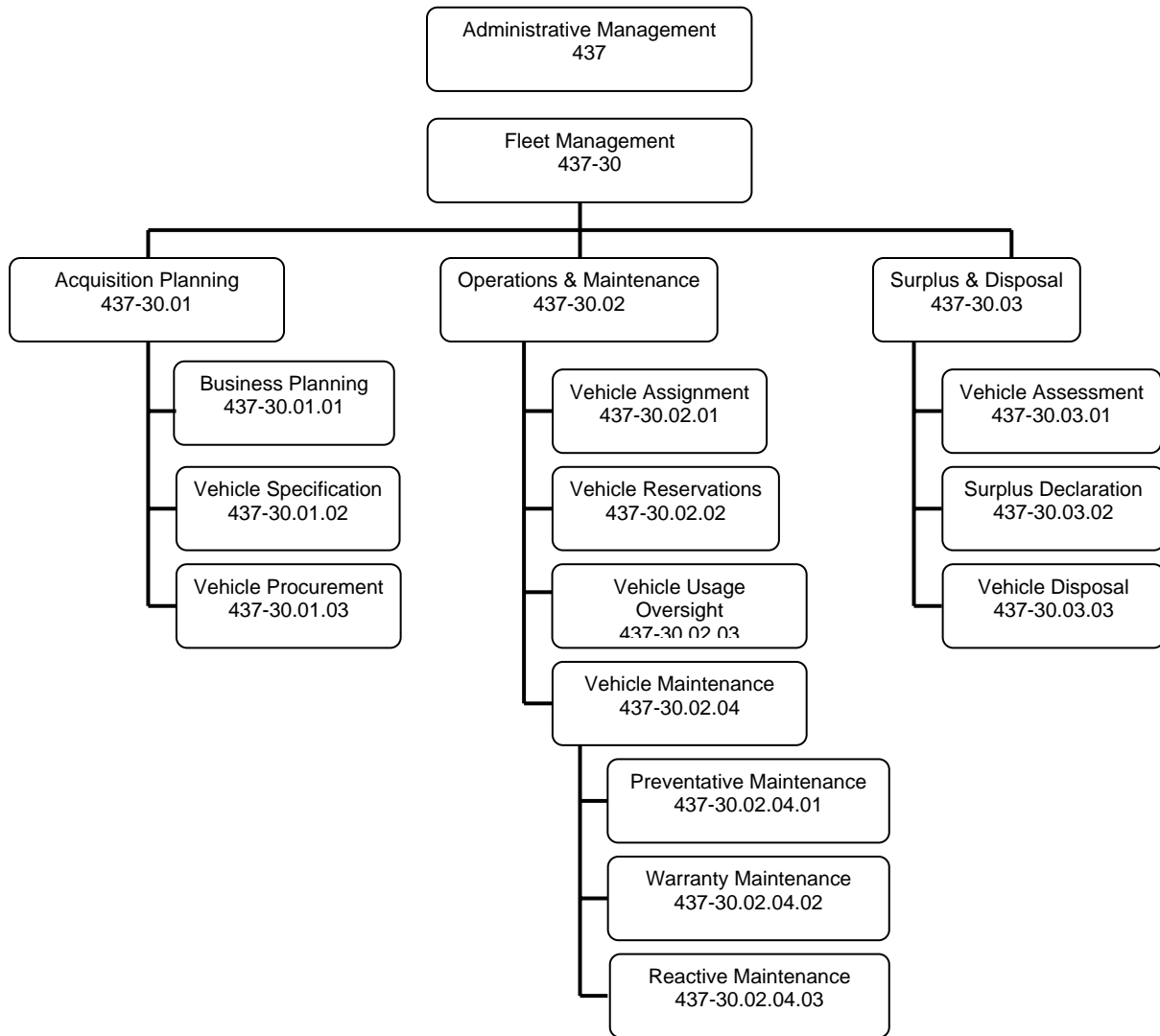
### Consistency with Best Practices

- **Adoption of a fleet lifecycle approach.** Not widely adopted in the Commonwealth. This would enable more informed financial decisions to be made throughout the fleet lifecycle.
- **Pool vehicles to maximize use.** Many vehicles are underutilized. Cost savings can be realized (and compliance with Commonwealth regulations) by returning fleet vehicles that do not meet minimum mileage requirements.
- **Employ enterprise wide systems and monitoring.** There is no enterprise Fleet Management system or monitoring capability. Implementing an enterprise-wide system could allow the Commonwealth to realize efficiencies across organizations.
- **Use reporting for actively fleet management.** Most agencies do not have accurate data, established KPIs, nor a way to report that data. Accurate reporting on key performance indicators will enable proactive management and greater efficiencies across the Commonwealth.

### Business Process Decomposition

The Fleet Management Process is composed of several sub-processes. These sub-processes are outlined in Exhibit 19.

**Exhibit 19 Fleet Management Business Process Decomposition**



## Survey Results

Appendix A provides a set of two summary reports per business function studied in Administrative Management. The first report shows response frequencies on questions selected to illustrate trends on particular management practices (these are multiple choice questions, so the results can be aggregated and graphed). The second report shows the set of responses on text questions, so that the range of views is reflected (these questions have responses easily displayed in a list format). The remaining survey questions are in a matrix format best understood in the individual survey response, so they are not included in the aggregate or grouped responses shown in these two reports. To view all responses to every question by survey, please view the reports included on the accompanying CD.

## Travel (437.60)

Travel involves the activities associated with planning, preparing, monitoring of business related travel for an organization's employees.

### As-Is Environment: Strengths

Travel policies are highly developed and structured in the Executive Branch Agencies. Executive Branch agencies are authorized to adopt supplemental policies and more restrictive procedures to assist agencies in managing their resources. Legislative, Judicial, and Independent agencies may establish their own travel policies and regulations.

State regulations are designed to ensure that all travel is reasonable and necessary. The use of State funds to accommodate personal comfort, convenience, and taste is not permitted. A review of the Agencies found that 100% of the responding agencies require supervisory approval prior to traveling with 73% of agencies maintaining supplemental and more restrictive travel policies. These more restrictive policies include procedures on:

- Out-of-state travel
- Reimbursement procedures
- Meal allowances
- Auditing procedures
- Non-compliance procedures

Particular strengths of travel management at the Commonwealth include:

- **Travel policies.** Travel policies are clearly documented and disseminated. Travelers can easily obtain the policy and understand the rules, regulations and their intent.
- **Prompt reimbursements.** Agencies recognize the need for prompt reimbursement of out-of-pocket travel expenses. Survey responses indicated that agencies consistently meet this objective.
- **Travel authorization.** Travel must be authorized in advance. Travel authorization requirements have been incorporated into the travel reimbursement process. A single form is often used for both the travel authorization approval process and ultimately for travel reimbursement.
- **EDI payments.** Travel reimbursements are expedited through direct electronic payment to employees that have elected to participate in this program.
- **Web-based travel forms.** Travel forms can be easily downloaded and completed.

### As-Is Environment: Weaknesses

Travel is very tightly regulated at the Commonwealth. Survey respondents suggested that the tight level of control is not cost effective. Respondents suggested that rules requiring employees to turn over travel rewards are difficult to monitor, enforce and are frequently violated.

Travel management in the Commonwealth has particular weaknesses in the following areas:

- **Lack of automated systems.** There is no enterprise system for requesting travel and for submitting, editing, and tracking travel reimbursements.
- **Lodging rates may not reflect market conditions.** Survey respondents consistently expressed concern that lodging rates do not reflect current market conditions. Rates are considered too low requiring travelers on a frequent basis to obtain permission to exceed standard per diem allowances.
- **Deducting Commute Miles adds complexity with limited value.** Policies require that travelers deduct the commuting distance from their home to their primary location. This is difficult to monitor.
- **No enterprise-wide hotel contracts.** The Commonwealth has no enterprise-wide travel agency or lodging contracts to ensure reasonable rates for the level of business provided by State employees.
- **Too many different per diem rates.** The State provides multiple per diem categories that are difficult to administer.
- **Travel Card is not the primary form of payment.** Survey responses demonstrate that the vast majority of travel is paid by cash and personal credit cards. The travel card is inefficiently applied. Rebates to the state have been sporadic and very low considering the overall level of state wide travel.

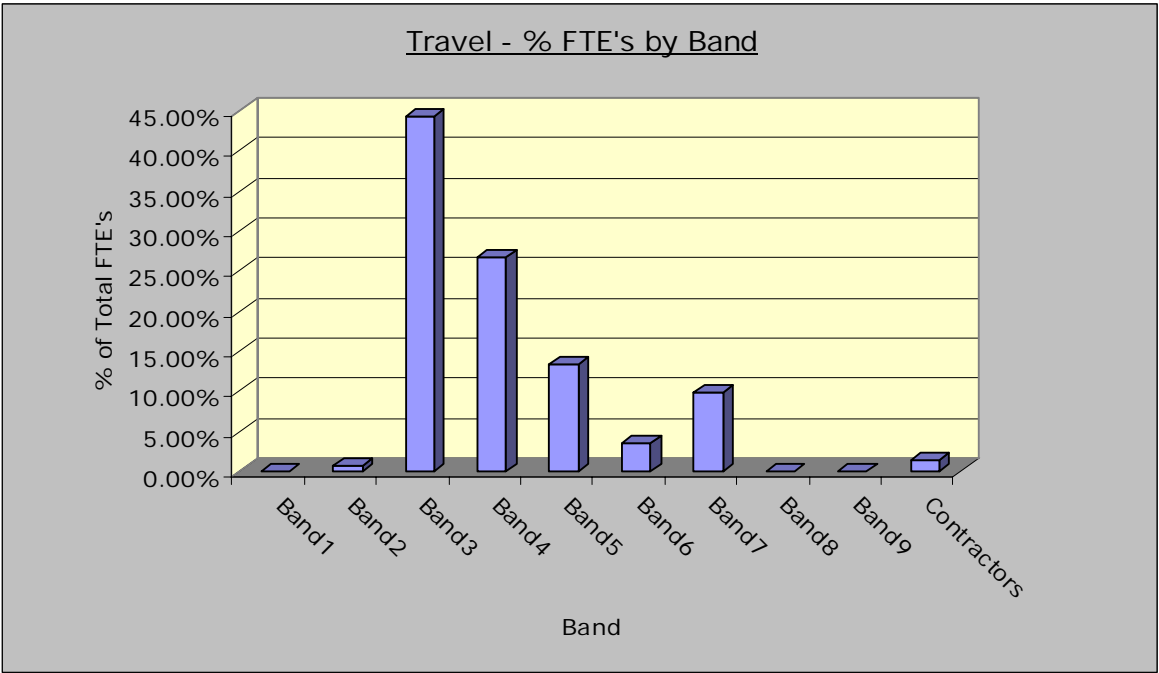
## As-Is Environment: Resources Required

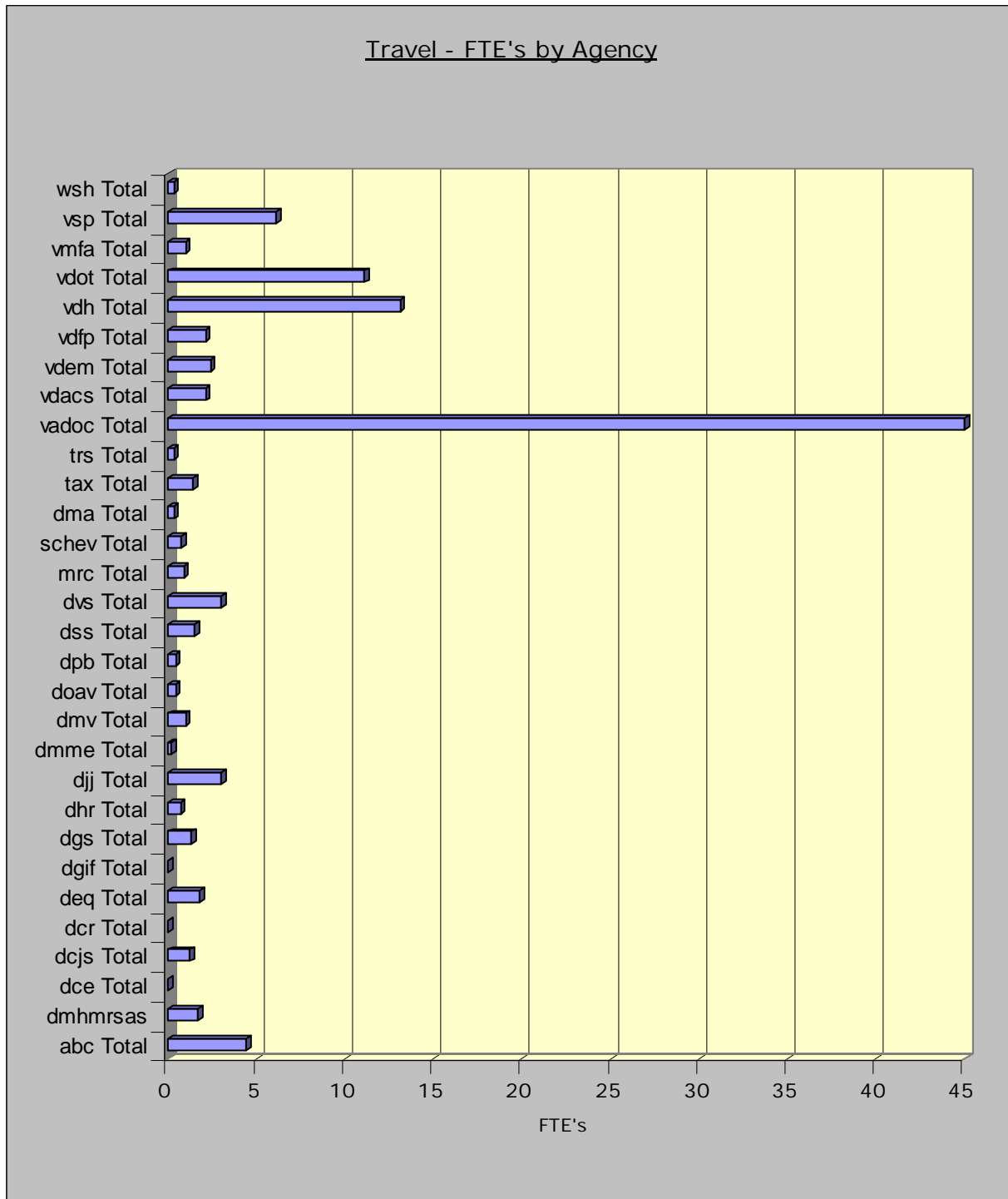
### Human Resources

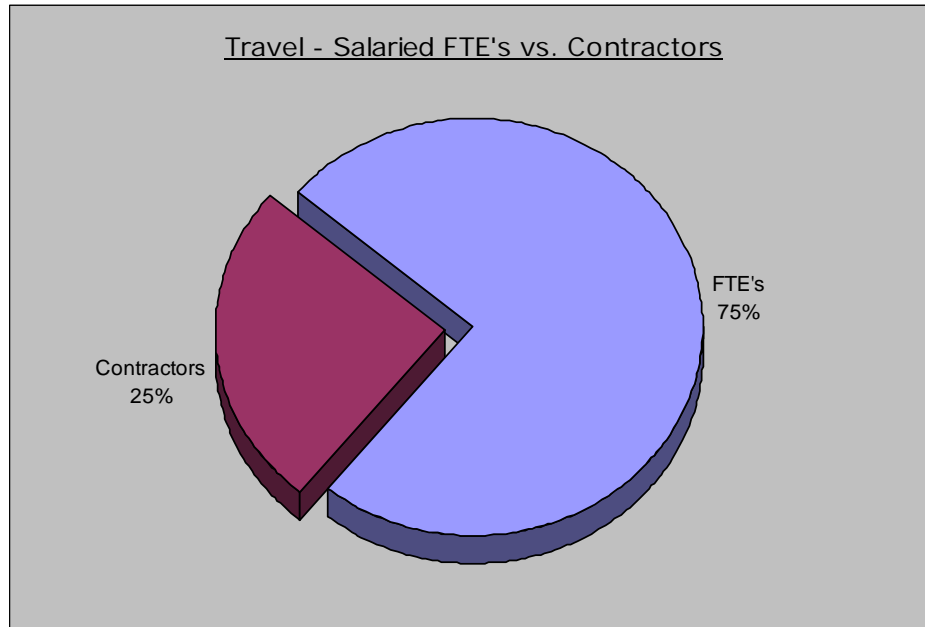
From our sample of Commonwealth Agencies, on average each agency commits 3.60 FTE's to administer the travel program. These resources are concentrated in the middle of the Commonwealth's salary structure. Exhibit 20 summarizes these resources by band. Travel Management resources are highly dispersed throughout state agencies. Exhibit 21 summarizes their distribution. Contractors make up a notable portion of the work force supporting Travel Management. Exhibit 22 provides a comparison of salaried and contract resources.



**Exhibit 20     Travel Management Resources**



**Exhibit 21     Distribution of Travel Management Resources by Agency**

**Exhibit 22      Utilization of Contractors in Travel Management****Technology Resources**

The Commonwealth, with the exception of EDI payment module, has no enterprise systems to support the travel function. The authorization, planning, and expense reimbursement processes on an enterprise basis is paper based. Once a reimbursement has been approved the payment is entered into the Accounts Payable modules and completed through the traditional AP process. Some agencies utilize their agency-based financial systems for tracking and reporting travel expenses.

**To-Be Preliminary Assessment****Commonwealth Recommendations**

- **Deploy automated travel system.** Provide a system that will enable paperless routing of travel requests, assist in booking and reservations, and streamline the travel reimbursement process. The system will provide workflow capabilities for routing and approval. System should contain per diem rules and provide calculation and edit checks.
- **Track status of travel requests and reimbursements.** Provide travelers with the ability to track the status of their travel request and reimbursement.
- **Provide travel forms with electronic signature.** Provide systems that permit travelers to submit forms in an electronic format.
- **Strategic sourcing for travel services.** Provide a strategic source for travel agency services. Agency may contract with hotels and airlines for discounts.

- **Supervisor certify travel documents.** Modify the reimbursement process to provide the immediate supervisor with the authority to certify original travel documents. All subsequent approvals (beyond the first line supervisor) and audits will be performed on electronic forms.
- **Apply per diem rates testing.** Apply electronic testing of travel rules and eliminate audits of every travel voucher.
- **Consolidate travel and purchase cards to a single vendor.** Rebates and rewards for travel will be significantly higher due to the success and desirability of the Purchasing Card.

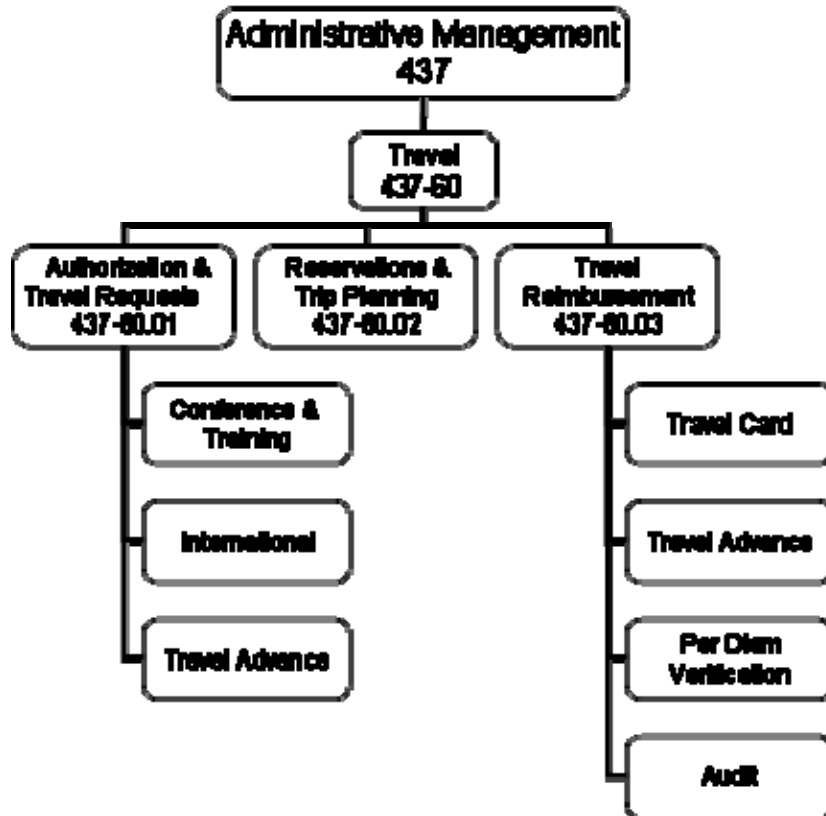
### Consistency with Best Practices

All of the above recommendations are in keeping with Industry Best Practices.

Recommendations offered by survey respondents will reduce overhead costs, time to process travel reimbursement, and aid in the enforcement of State travel procedures. Travel software with electronic workflow and edit rules will eliminate most processing errors and allow scarce auditing resources to be applied to higher return AP processing. Most large firms with reasonable numbers of travelers utilize travel software provided by the major credit card companies. Strategic sourcing for travel is common. Travel agencies may be competitively selected through a formal services solicitation.

### Business Process Decomposition

Travel Management is composed of several sub-processes. These sub-processes are depicted in Exhibit 23.

**Exhibit 23 Business Process Decomposition**

## Survey Results

Appendix A provides a set of two summary reports per business function studied in Administrative Management. The first report shows response frequencies on questions selected to illustrate trends on particular management practices (these are multiple choice questions, so the results can be aggregated and graphed). The second report shows the set of responses on text questions, so that the range of views is reflected (these questions have responses easily displayed in a list format). The remaining survey questions are in a matrix format best understood in the individual survey response, so they are not included in the aggregate or grouped responses shown in these two reports. To view all responses to every question by survey, please view the reports included on the accompanying CD.